

## DETAILED ACTION

### ***Period for Response Restarted***

1. The previous action, addressed to "Docket Clerk, PO Drawer 800889, Dallas, TX 75380 was returned as undeliverable. Therefore this action is being re-sent with the period for response restarted.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1,6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath et al (US 6,792,286) in view of Macera et al (US 5,490,252).

Consider claim 1. Bharath teaches an apparatus for providing access on a fixed wireless network comprising:

a subscriber access device mounted on the exterior of the subscriber premises (*Bharath shows the subscriber access device mounted on the roof as item 310 in figure 3 and shows the components of item 310 in figures 4a&b. Note that figures 4a, and b show the subscriber device connecting through the walls to items 350,340 and 335 in the interior*), the device comprising:

a wireless transceiver (*Bharath figure 4a, item 450*), communicating with the fixed wireless network (*Bharath figure 3, item 300, described in column 5, lines 1-25*) and both

a data interface for communication with a data processing device within the premises (*Bharath see especially figure 4A, item 420 shown connecting through the wall to item 350 in the interior, and described in column 6, lines 10-40*) and

a voice interface capable communicating with a telephony device within said subscriber premises (*Bharath see figure 4a, items 430, shown connecting through the wall to items 340 and 335 in the interior, and described in column 6, lines 10-30*).

Bharath lacks a teaching of a mezzanine interface coupled to the transceiver and capable of receiving a removable module communicating with the data processing device. (*Note that the claimed, “mezzanine interface” is simply the interface to which a removable module is connected*). Macera teaches a removable data interface module (*Macera see especially column 5, line 65 – column 6, line 21. Macera teaches that this configuration is compatible with Ethernet LAN’s as described in column 5, line 65 –*

*column 6, line 21, Note that the connection interface that the module plugged into would correspond to the claimed mezzanine interface). It would have been obvious to one of ordinary skill in the art to configure the data interface as shown in Macera in order to allow for easy swap out when needed as well as making it compatible with T1/E1 lines, as well as Ethernet LAN's. Note that the interface would be "separate" from the circuit. Note also that since the voice interface and telephony devices are presented as alternatives, the prior art need not show them to anticipate the claim.*

As to claim 6, Bharath in view of Macera as applied to claim 1 teaches a removable data interface module configured as T1/E1 (*Macera see especially column 5, line 65 – column 6, line 21. Macera teaches that this configuration is compatible with Ethernet LAN's as described in column 5, line 65 – column 6, line 21, Note that the connection interface the module plugged into would correspond to the claimed mezzanine interface).*

As to claim 7, as applied to claim 5 above, Bharath in view of Macera teach use of T1/E1. However they lack a teaching of using T3/E3 lines. Official Notice it taken that T3/E3 lines are well known in the art. Therefore it would have been obvious to one of ordinary skill in the art to modify the interface to ensure it was compatible with subscribers having T3/E3 lines.

As to claim 8, note that Bharath in view of Macera as applied to claim 5 above also teaches the module communicating via an LAN (*Macera see especially column 5, line 65 – column 6, line 21), however the combination lacks a teaching of the LAN being wireless. Official Notice is taken that wireless LAN's are notoriously well known in the*

art. It would have been obvious to one of ordinary skill in the art to modify Bharath in view of Uola and in view of Macera to communicate via wireless LAN in order to allow the data terminals to be placed anywhere without having to extensively wire the premises.

As to claim 9, note that Bharath teaches a data interface for communication with a data processing device within the premises (*Bharath see especially figure 4A, item 420 shown connecting through the wall to item 350 in the interior, and described in column 6, lines 10-40*).

As to claim 10, note that Bharath in view of Macera as applied to claim 9 above, also teaches the module communicating via an Ethernet LAN (*Macera see especially column 5, line 65 – column 6, line 21*).

As to claim 11, while Bharath in view of Macera as applied to claim 9 above teaches an Ethernet interface, it is silent as to the particular standard used by the Ethernet card. Official Notice it taken that the claimed standard is well known in the art. Therefore it would have been obvious to one of ordinary skill in the art to modify the interface to ensure it was compatible with subscribers using a particular standard.

5. Claims 2,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath et al (US 6,792,286) in view of Macera et al (US 5,490,252) and in view of Lim (US 5,995,851).

Consider claim 5. Bharath in view of Macera lacks a teaching of a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises.

Lim, in a similar apparatus for providing subscriber access on a fixed wireless network (*Lim see especially column 1, lines 6-37*), teaches a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises (*Lim see especially column 3, lines 55-62*). Lim teaches using a DC converter to allow the exterior device to only require one cable for connection since the RF and DC can use the same coax (*Lim column 11, lines 24-33*). It would have been obvious to one of ordinary skill in the art to modify Bharath with a back up power supply in order to allow the user to communicate in the event of a power failure, as well as to eliminate the need for a separate power cable as taught by Lim.

As to claim 2, note that the back up power supply of Bharath in view of Lim would be inside the subscriber premises (*Lim teaches the power supply being indoors in column 11, lines 23-37*).

6. Claims 3,4,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath et al (US 6,792,286) in view of Macera et al (US 5,490,252) and in view of Uola (US 5,603,095).

Consider claim 5. Bharath in view of Macera lacks a teaching of a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises.

In a similar apparatus for providing subscriber access on a fixed wireless network (*Uola see especially figure 1, described in column 3, line 58 – column 4, line 22*), Uola teaches a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises (*Uola see especially column 4, line 50 – column 5, line 15*). Note also that Uola teaches the backup power supply being part of the subscriber terminal (*Uola notes that the terminal comprises the backup power supply in column 4, line 50 – column 5, line 15*) It would have been obvious to one of ordinary skill in the art to modify Bharath with a back up power supply as taught by Uola in order to allow the user to communicate in the event of a power failure.

As to claim 3, note that the backup power supply of Bharath in view of Uola would have the subscriber terminal comprising the backup power (*Uola notes that the terminal comprises the backup power supply in column 4, line 50 – column 5, line 15*), and the subscriber terminal is mounted outside the premises on the roof in Bharath (*Bharath shows the subscriber access device mounted on the roof as item 310 in figure 3 and shows the components of item 310 in figures 4a&b. Note that figures 4a, and b show the subscriber device connecting through the walls to items 350,340 and 335 in the interior*).

As to claim 4, (*note that claim 4 has been rejected under section 112 for lack of antecedent basis. This rejection assumes that claim 5 should have been dependant on claim 5*)

Bharath lacks a teaching of a power monitor for detecting low power or power failure and transmitting an alarm to the fixed wireless network. Note that Uola also teaches a power monitor for detecting low power or power failure and transmitting an alarm to the fixed wireless network (*Uola see especially column 4, line 50 – column 5, line 15*). It would have been obvious to one of ordinary skill in the art to modify Bharath to use the power monitor and alarm arrangement of Uola in order to ensure that any problems in operation was immediately noted for correction

7. Claims 12,13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath et al in view of Macera and in view of Willer (US 6,836,546).

Consider claims 12,13. Bharath in view of Macera as applied to claim 1 above, lacks a teaching of utilizing a shared voice & data twisted pair according to the HPNA protocol. Willer teaches utilizing shared voice and data twisted pair according to the HPNA protocol (*Willer see especially column 3, lines 64 – column 4, line 25*). It would have been obvious to one of ordinary skill in the art to modify Bharath in view of Macera to use the combined twisted pair arrangement as taught by Willer in order to reduce the amount of wiring required while still conforming to accepted protocols.

8. Claims 14,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath et al (US 6,792,286) in view of Lim (US 5,995,851) and in view of Macera et al (US 5,490,252).

Consider claim 14. Bharath teaches an apparatus for providing access to a wire line network (*note that Bharath ultimately provides access to the wire line PSTN, shown in figure 3, described in column 5, lines 1-25*) comprising:

a subscriber access device mounted on the exterior of the subscriber premises (*Bharath shows the subscriber access device mounted on the roof as item 310 in figure 3 and shows the components of item 310 in figures 4a&b. Note that figures 4a, and b show the subscriber device connecting through the walls to items 350,340 and 335 in the interior*), the device comprising:

a transceiver interface (*Bharath figure 4a, item 450*), communicating with the wire line network. (*Bharath figure 3, item 300, described in column 5, lines 1-25. Note that the claim does not require the connection to be entirely wired, therefore the RF transceiver of Bharath is an interface to the wire line network*) and both

a data interface for communication with a data processing device within the premises (*Bharath see especially figure 4A, item 420 shown connecting through the wall to item 350 in the interior, and described in column 6, lines 10-40*) and

a voice interface capable communicating with a telephony device within said subscriber premises (*Bharath see figure 4a, items 430, shown connecting through the wall to items 340 and 335 in the interior, and described in column 6, lines 10-30*).

Bharath lacks a teaching of a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises.

Lim, in a similar apparatus for providing subscriber access on a fixed wireless network (*Lim see especially column 1, lines 6-37*), teaches a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises (*Lim see especially column 3, lines 55-62*). Lim teaches using a DC converter to allow the exterior device to only require one cable for connection since the RF and DC can use the same coax (*Lim column 11, lines 24-33*). It would have been obvious to one of ordinary skill in the art to modify Bharath with a back up power supply in order to allow the user to communicate in the event of a power failure, as well as to eliminate the need for a separate power cable as taught by Lim.

Bharath lacks a teaching of a mezzanine interface coupled to the transceiver and capable of receiving a removable module communicating with the data processing device. (*Note that the claimed, “mezzanine interface” is simply the interface to which a removable module is connected*). Macera teaches a removable data interface module (*Macera see especially column 5, line 65 – column 6, line 21. Macera teaches that this configuration is compatible with Ethernet LAN’s as described in column 5, line 65 – column 6, line 21, Note that the connection interface that the module plugged into would correspond to the claimed mezzanine interface*). It would have been obvious to one of ordinary skill in the art to configure the data interface as shown in Macera in order to

allow for easy swap out when needed as well as making it compatible with T1/E1 lines, as well as Ethernet LAN's. Note that the interface would be "separate" from the circuit.

As to claim 15, note that the back up power supply of Bharath in view of Lim would be inside the subscriber premises (*Lim teaches the power supply being indoors in column 11, lines 23-37*).

9. Claims 14,16,17,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath et al (US 6,792,286) in view of Uola (US 5,603,095) and in view of Macera et al (US 5,490,252).

Consider claim 14. Bharath teaches an apparatus for providing access to a wire line network (*note that Bharath ultimately provides access to the wire line PSTN, shown in figure 3, described in column 5, lines 1-25*) comprising:

a subscriber access device mounted on the exterior of the subscriber premises (*Bharath shows the subscriber access device mounted on the roof as item 310 in figure 3 and shows the components of item 310 in figures 4a&b. Note that figures 4a, and b show the subscriber device connecting through the walls to items 350,340 and 335 in the interior*), the device comprising:

a transceiver interface (*Bharath figure 4a, item 450*), communicating with the wire line network. (*Bharath figure 3, item 300, described in column 5, lines 1-25. Note that the claim does not require the connection to be entirely wired, therefore the RF transceiver of Bharath is an interface to the wire line network*) and both

a data interface for communication with a data processing device within the premises (*Bharath see especially figure 4A, item 420 shown connecting through the wall to item 350 in the interior, and described in column 6, lines 10-40*) and

a voice interface capable communicating with a telephony device within said subscriber premises (*Bharath see figure 4a, items 430, shown connecting through the wall to items 340 and 335 in the interior, and described in column 6, lines 10-30*).

Bharath lacks a teaching of a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises.

In a similar apparatus for providing subscriber access on a fixed wireless network (*Uola see especially figure 1, described in column 3, line 58 – column 4, line 22*), Uola teaches a backup power supply capable of providing power to said subscriber access device in the event of a failure of main AC power in said subscriber premises (*Uola see especially column 4, line 50 – column 5, line 15*). Note also that Uola teaches the backup power supply being part of the subscriber terminal (*Uola notes that the terminal comprises the backup power supply in column 4, line 50 – column 5, line 15*) It would have been obvious to one of ordinary skill in the art to modify Bharath with a back up power supply as taught by Uola in order to allow the user to communicate in the event of a power failure.

Bharath lacks a teaching of a mezzanine interface coupled to the transceiver and capable of receiving a removable module communicating with the data processing device. (*Note that the claimed, “mezzanine interface” is simply the interface to which a*

*removable module is connected).* Macera teaches a removable data interface module (*Macera see especially column 5, line 65 – column 6, line 21. Macera teaches that this configuration is compatible with Ethernet LAN's as described in column 5, line 65 – column 6, line 21, Note that the connection interface that the module plugged into would correspond to the claimed mezzanine interface*). It would have been obvious to one of ordinary skill in the art to configure the data interface as shown in Macera in order to allow for easy swap out when needed as well as making it compatible with T1/E1 lines, as well as Ethernet LAN's.

As to claim 16, note that the backup power supply of Bharath in view of Uola would have the subscriber terminal comprising the backup power (*Uola notes that the terminal comprises the backup power supply in column 4, line 50 – column 5, line 15*), and the subscriber terminal is mounted outside the premises on the roof in Bharath (*Bharath shows the subscriber access device mounted on the roof as item 310 in figure 3 and shows the components of item 310 in figures 4a&b. Note that figures 4a, and b show the subscriber device connecting through the walls to items 350,340 and 335 in the interior*).

As to claim 17, Bharath lacks a teaching of a power monitor for detecting low power or power failure and transmitting an alarm to the fixed wireless network. Note that Uola also teaches a power monitor for detecting low power or power failure and transmitting an alarm to the fixed wireless network (*Uola see especially column 4, line 50 – column 5, line 15*). It would have been obvious to one of ordinary skill in the art to

modify Bharath to use the power monitor and alarm arrangement of Uola in order to ensure that any problems in operation was immediately noted for correction

Consider claim 19. Bharath as applied to claim 14 above, lacks a teaching of the data processing interface being a removable module configured as T1/E1. Macera teaches a removable data interface module configured as T1/E1 (*Macera see especially column 5, line 65 – column 6, line 21. Macera teaches that this configuration is compatible with Ethernet LAN's as described in column 5, line 65 – column 6, line 21.*).

It would have been obvious to one of ordinary skill in the art to configure the data interface as shown in Macera in order to allow for easy swap out when needed as well as making it compatible with T1/E1 lines, as well as Ethernet LAN's.

As to claim 20, as applied to claim 14 above, Bharath in view of Macera and Uola teach use of T1/E1. However they lack a teaching of using T3/E3 lines. Official Notice it taken that T3/E3 lines are well known in the art. Therefore it would have been obvious to one of ordinary skill in the art to modify the interface to ensure it was compatible with subscribers having T3/E3 lines.

As to claim 21, note that Bharath in view of Macera and in view of Uola as applied to claim 14 above also teaches the module communicating via an LAN (*Macera see especially column 5, line 65 – column 6, line 21*), however the combination lacks a teaching of the LAN being wireless. Official Notice is taken that wireless LAN's are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art to modify Bharath in view of Uola and in view of Macera to communicate via

wireless LAN in order to allow the data terminals to be placed anywhere without having to extensively wire the premises.

As to claim 22, note that Bharath teaches a data interface for communication with a data processing device within the premises (*Bharath see especially figure 4A, item 420 shown connecting through the wall to item 350 in the interior, and described in column 6, lines 10-40*).

As to claim 23, note that Bharath in view of Macera and in view of Uola as applied to claim 22 above, also teaches the module communicating via an Ethernet LAN (*Macera see especially column 5, line 65 – column 6, line 21*).

As to claim 24, while Bharath in view of Macera and in view of Uola as applied to claim 22 above teaches an Ethernet interface, it is silent as to the particular standard used by the Ethernet card. Official Notice it taken that the claimed standard is well known in the art. Therefore it would have been obvious to one of ordinary skill in the art to modify the interface to ensure it was compatible with subscribers using a particular standard.

10. Claims 25,26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharath in view of Macera and in view of Uola and in view of Willer (US 6,836,546).

Consider claims 25,26. Bharath in view of Macera and in view of Uola as applied to claim 14 above, lacks a teaching of utilizing a shared voice & data twisted pair according to the HPNA protocol. Willer teaches utilizing shared voice and data twisted pair according to the HPNA protocol (*Willer see especially column 3, lines 64 – column 4, line 25*). It would have been obvious to one of ordinary skill in the art to modify

Bharath in view of Uola to use the combined twisted pair arrangement as taught by Willer in order to reduce the amount of wiring required while still conforming to accepted protocols.

### **Response to Arguments**

11. Applicant's arguments filed December 28, 2007 have been fully considered but they are not persuasive.
12. Applicant argues that the combination would not function as claimed. The examiner maintains that one of ordinary skill would be able to equip the arrangement of Bharath with removable modules as taught by Macera.

### **Conclusion**

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. SOBUTKA whose telephone number is (571)272-7887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-41774177.

17. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

**CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip J Slobutka/  
Primary Examiner, Art Unit 2618

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